

I claim:

1. A combat shock-isolation system for isolating the effects of shocks that could imperil the operation of a ship which is directly supported by a substantially incompressible medium comprising:

5 a ship having a first mass, said ship having a deck thereon;

a deck platform said deck platform having a second mass substantially less than the first mass, said deck platform spacedly mounted from said deck so as to permit relative displacement between said deck and said ship without contact therebetween;

10 a console, said console fixedly mounted on said deck platform;

a console-operator station, said console-operator station fixedly mounted on said deck platform with said console-operator station mounted proximate said console to enable an operator in the console-operator station to interact with said console; and

15 a shock mount connected to said deck platform and to said ship to support said deck platform so that a shock received by the ship is simultaneously isolated from both the console-operator station and the console by the shock mount supporting the deck platform to thereby prevent the console-operator station and the console to move in relation to each other and thereby minimize injury to the operator thereon while simultaneously suppressing shock and vibration energy into the operator and the console-operator station.

20 2. The shock-isolation system of claim 1 wherein the first mass is a minimum of one hundred-fold larger than the second mass.

3. The shock-isolation system of claim 1 wherein the console operator platform includes a

25 chair for a console operator to sit therein when interacting with the console.

4. The shock-isolation system of claim 1 wherein the console is a control console with said deck platform mounted coextensive with said deck to provide operator access thereto.

5. The shock-isolation system of claim 1 wherein the deck platform is solely supported therefrom by said shock mounts.

6. The shock-isolation system of claim 1 wherein the deck platform comprises a rigid island platform with the operator station fixedly secured thereto.

10 7. The shock-isolation system of claim 6 wherein the console is fixedly secured with vibration mounts to said rigid island platform so that console and said rigid island platform operate as a dynamic unit.

15 8. A shock-isolation system for isolation of shocks from a supporting structure comprising: a unitary platform, said unitary platform having an operator station thereon; a first mounting member for rigidly securing a console to said unitary platform; a shock mount for supporting said unitary platform in a condition where the sole support for the unitary platform is the shock mount so that the unitary platform is free to remain spatially fixed to isolate the unitary platform from the effects of high "g" shocks with the operator station and the unitary platform further inhibiting opportunity for operator injury by simultaneously preventing the operator station and the unitary platform from moving relative to one another.

20 9. The shock-isolation system of claim 8 including a second mounting member for securing the operate station thereto.

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10 The shock-isolation system of claim 9 wherein the operator station includes a foot deck  
for an operator.

11. The shock-isolation system of claim 10 wherein the shock-isolation system is only  
5 supported by said shock mount.

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10 12. The shock-isolation system of claim 11 wherein the unitary platform includes an upright  
wall with said upright wall including the first mounting member.

13. The shock-isolation system of claim 12 wherein the unitary platform is metal.

14. The shock-isolation system of claim 13 wherein the unitary platform has a surface area of  
about 20 to 30 square feet.

15. The shock-isolation system of claim 8 wherein the shock mount provides vibration  
damping.

16. The shock-isolation system of claim 8 wherein the shock mount simultaneously isolates  
the operator station and the unitary platform from shock and vibration.

20 17. The shock-isolation system of claim 8 wherein the shock mount dampens vibration and  
shock to minimize the relative motion between the operator station and the operator.

18. A method of isolating an operator on a structure from injury by an operator's console  
25 comprising the steps of:

supporting a portion of the structure with shock mounts connected to the structure and the portion of the structure to provide shock isolation to the portion of the structure from the structure; and

5 mounting the operator's console directly to the portion of the structure to prevent relative motion between the portion of the structure and the operator's console so that when a shock is transmitted to the structure the portion of the structure and the operator's console are shock isolated as a unit from the structure to thereby minimize injury to an operator.

19. The method of claim 18 including the step of including vibration dampers in the shock mounts.

20. The method of claim 18 including the step of solely supporting the portion of the structure from the structure by the shock mounts.